Amendments to the Claims

Claims 1-16 **(Canceled)**

17. **(New)** A task scheduling device for realizing a multitask processing by performing scheduling of a plurality of tasks, the device comprising:

a task selector which selects a task of the highest priority among the plurality of tasks, as a task to be executed;

a high priority setter which cyclically sets the priority of a specific task among the plurality of tasks to a first predetermined priority every predetermined time interval T; and

a low priority setter which cyclically sets the priority of the specific task to a second predetermined priority lower than the first priority before the time interval T elapses and after the priority of the specific task is set to the first priority by the high priority setter.

18. **(New)** The task scheduling device according to Claim 17, wherein the low priority setter cyclically sets the priority of the specific task to the second priority upon lapse of a predetermined time duration TH after the priority of the specific task is set to the first priority by the high priority setter, the time duration TH being shorter than the time interval T.

19. **(New)** The task scheduling device according to Claim 17, further comprising a processed amount judger which judges whether an amount of data processed by the specific task has reached a predetermined amount after the priority of the specific task is set to the first priority by the high priority setter, wherein the low priority setter sets the priority of the specific task to the second priority when the processed amount judger judges that the processed amount has reached the predetermined amount.

20. **(New)** The task scheduling device according to Claim 19, wherein the processed amount judger includes a processed amount comparator which determines whether the processed amount has reached the predetermined amount by comparing a variable whose value is varied with execution of the specific task with a specified value.

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21. **(New)** The task scheduling device according to Claim 19, further comprising a buffer which temporarily stores the data outputted from the specific task, wherein the processed amount judger includes a processed amount comparator which determines whether the processed amount has reached the predetermined amount by comparing the amount of data written in the buffer by execution of the specific task with a specified value.

22. **(New)** The task scheduling device according to Claim 17, further comprising a task priority table in which the plurality of tasks and the respective priorities thereof are recorded in correlation with each other, wherein

the high priority setter cyclically sets the priority of the specific task to the first priority by writing the first priority as the priority assigned to the specific task in the task priority table;

the low priority setter cyclically sets the priority of the specific task to the second priority by writing the second priority as the priority assigned to the specific task in the task priority table; and

the task selector refers to the task priority table to select the task whose priority is the highest among the plurality of priorities recorded in the task priority table, as the task to be executed.

23. **(New)** The task scheduling device according to Claim 22, further comprising a specific task table in which the specific task, the first priority, and the second priority are recorded in correlation with each other, wherein

the high priority setter refers to the specific task table to read out the first priority recorded in the specific task table if information relating to the specific task has been recorded in the specific task table, and to write the readout first priority as the priority assigned to the specific task in the task priority table, and

the low priority setter refers to the specific task table to read out the second priority recorded in the specific task table if the information relating to the specific task has been recorded in the specific task table, and to write the readout second priority as the priority assigned to the specific task in the task priority table.

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24. **(New)** The task scheduling device according to Claim 23, wherein the specific task writes the information relating to the specific task in the specific task table, and erases the recorded information from the specific task table.

25. **(New)** The task scheduling device according to Claim 17, wherein at least one of the high priority setter and the low priority setter is realized as a function of an operating system.

26. **(New)** The task scheduling device according to Claim 25, wherein at least one of the high priority setter and the low priority setter is realized as an interrupt handler.

27. **(New)** The task scheduling device according to Claim 17, wherein at least one of the high priority setter and the low priority setter is realized as a function of the specific task.

28. **(New)** The task scheduling device according to Claim 27, wherein at least one of the high priority setter and the low priority setter is realized as a signal handler.

29. **(New)** A task scheduling method for realizing a multitask processing by performing scheduling of a plurality of tasks, comprising:

a task selecting step of selecting a task whose priority is the highest among the plurality of tasks as a task to be executed;

a high priority setting step of cyclically setting the priority of a specific task among the plurality of tasks to a first predetermined priority every time interval T; and

a low priority setting step of cyclically setting the priority of the specific task to a second predetermined priority lower than the first priority before the time interval T elapses and after the priority of the specific task is set to the first priority by the high priority setter.

30. **(New)** A computer-readable recording medium recording a task scheduling program which causes a computer to function as a task scheduling device for realizing a multitask processing by performing scheduling of a plurality of tasks, the task scheduling program causing the computer to function as:

a task selecting means which selects a task whose priority is the highest among the plurality of tasks as a task to be executed;

a high priority setting means which cyclically sets the priority of a specific task among the plurality of tasks to a first predetermined priority every time interval T; and

a low priority setting means which cyclically sets the priority of the specific task to a second predetermined priority lower than the first priority before the time interval T elapses and after the priority of the specific task is set to the first priority by the high priority setting means.

31. **(New)** A transmission medium carrying a task scheduling program which causes a computer to function as a task scheduling device for realizing a multitask processing by performing scheduling of a plurality of tasks, the task scheduling program causing the computer to function as:

a task selecting means which selects a task whose priority is the highest among the plurality of tasks as a task to be executed;

a high priority setting means which cyclically sets the priority of a specific task among the plurality of tasks to a first predetermined priority every time interval T; and

a low priority setting means which cyclically sets the priority of the specific task to a second predetermined priority lower than the first priority before the time interval T elapses and after the priority of the specific task is set to the first priority by the high priority setting means.